ABSTRACT

A fuel injection system includes a fuel pressure boost pump having a pump body that defines a pump cylinder and a pump chamber. A piston structure is movable in the pump cylinder along a longitudinal axis of the piston structure. A fuel inlet conduit and a fuel outlet conduit are in flow connection with the pump chamber, the fuel inlet conduit being provided with a first one-way valve and the fuel outlet conduit being provided with a second one-way valve. A temperature sensor is in thermally conductive contact with the pump body.